# **COMMITTEE STAFF**

# RESEARCH, DEVELOPMENT, TEST, AND EVALUATION BACKUP BOOK

FY 1998/1999 BIENNIAL BUDGET ESTIMATES

FEBRUARY 1997

Apparent or proper mecons

THE JOINT STAFF

19970326 017

# THE JOINT STAFF FY 1998/FY 1999 PRESIDENT'S BUDGET Research, Development, Testing and Evaluation, Defense-Wide

#### Supporting Exhibits

| Program Element Comparison Summary | RDT&E Programs | RDT&E Budget Item Justification Sheet | RDT&E Program Element/Project Cost Breakdown |
|------------------------------------|----------------|---------------------------------------|--|
| R-33                               | R-1            | R-2                                   | R-3  |

#### INTRODUCTION AND EXPLANATION OF CONTENTS PROGRAM ELEMENT COMPARISON SUMMARY FY 1998 BUDGET ESTIMATES

| Ŀ     | _             | -  |
|-------|---------------|--|
| Ĺ     | 1             | Ī  |
| F & L | 2             | ֡֝֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֡֡֡֜֜֜֜֡֡֡֡ |
| L     | 1             | ֡֝֝֡֝֡֝֡֝֡֝֝֡֡֝֡֝֝֡֡֡֝֡֡֝֡֡֡֝֡֡֡֡֡֝֡֡֡֡֡     |
| × 4 × | ₹             |  |
| L     | <u>`</u>      | <u> </u>                                     |
| Ì     | =             | )  |
| è     | $\frac{1}{2}$ | _  |

#### REMARKS

# BUDGET ACTIVITY 4: ADVANCED TECHNOLOGY DEVELOPMENT

0603734J, ISLAND SUN

SAR - Justification under separate cover,

# BUDGET ACTIVITY 6: MANAGEMENT SUPPORT

0605126J, Joint Theater Air & Missile Defense Organization (JTAMDO)

JTAMDO is a new organization that will consolidate on-going DoD efforts in theater air & missile defense. Funding is Iransferred to the Joint Staff beginning in FY98.

# BUDGET ACTIVITY 7: OPERATIONAL SYSTEM DEVELOPMENT

0208052J Joint Analytical Model Improvement JAMIP previously had only O&M and procurement funding. The RDT&E funds are for R&D on challenging representation Program (JAMIP)

problems and independent testing.

0303149J, C4l for the Warrior (C4IFTW)

0902298J, Management Headquarters

The Joint C4ISR Battle Center was transferred from DISA to the Joint Staff in FY98.

Capabilities Assessments (JWCA) and JSIMS. The FY96 column reflected an \$11 Million reprogramming for JWCA that was dter denied (current amount of \$3.999 million is the BTR for In the FY97 PB, this PE included both Joint Warfighting ACA)

The JSIMS funding has been moved into the new JSIMS PE 0902740

0902740J, Joint Simulation Systems (JSIMS)

New Program Element established during FY97. Funds Iransferred from Management HQ, PE 0902298J

1001017J, Partnership-for-Peace (PFP)

cooperative R&D effort with 27 PFP nations for the PFP RDT&E funding begins in FY98 for PFP. Funds are for a Information Management System (PIMS)



**PM/RDTEexhib.xls** 



## THE JOINT STAFF FY1998 BUDGET ESTIMATES RDT&E PROGRAMS \$ IN MILLIONS

| PROGRAM<br>ELEMENT | TITLE   | BUDGET<br>ACTIVITY | FY96  | FY97   | FY98   | FY99   |
|--------------------|---|--------------------|-------|--------|--------|--------|
|                    |   |                    |       |        |        |        |
| 0603734J           | ISLAND SUN *  | 4                  | 1.356 | 1.216  | 0.000  | 0.000  |
| 0605126J           | Joint Theater Air & Missile Defense Office (JTAMDO) | 9                  | 0.000 | 0.000  | 23.100 | 17.850 |
| 0208052J           | Jt Analytical Model Improvement Prog (JAMIP)        | 7                  | 0.000 | 1.000  | 2.186  | 1.883  |
| 0303149J           | C4I for the Warrior (C4IFTW)                        | 7                  | 0.171 | 2.554  | 5.554  | 3.215  |
| 0902298J           | Management Headquarters                             | 7                  | 3.999 | 10.012 | 10.035 | 9.806  |
| 0902740J           | Joint Simulation Systems (JSIMS)                    | 7                  | 0.000 | 21.054 | 24.321 | 25.179 |
| 1001001            | Partnership-for Peace (PFP)                         | 7                  | 0.000 | 0.000  | 1.993  | 1.991  |
| TOTALS             |   |                    | 5.526 | 35.836 | 67.189 | 59.924 |

<sup>\*</sup> Exhibit R-2 for ISLAND SUN will be forwarded under separate cover.

#### UNCLASSIFIED

| RDT&E                                | BUDGET  | ITEM JU | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | TION SHE     | ET (R-2 I    | (xhibit)   |               |         | Date:   | Feb-97     |
|--------------------------------------|---------|---------|---|--------------|--------------|--|---------------|---------|---|------------|
| Appropriation/Budget Activity        |         |         | R-1 Item Nomenclature                               | ature        |              |  |               |         |   |            |
| RDT&E, DEFENSE WIDE, JOINT STAFF/BA6 | VFF/BA6 |         | 0605126J J  | oint Theater | Air and Miss | 0605126J Joint Theater Air and Missile Defense Organization (JTAMDO) | rganization ( | JTAMDO) |   |            |
|                                      |         |         |   |              |              |  |               |         | Cost to   | TOTAL      |
| COST (\$ IN MILLIONS)                | FY96    | FY97    | FY98  | FY99         | FY00         | FY01   | FY02          | FY03    | Complete  | COST       |
| TOTAL PE COST                        | 0       | 0       | 23.100  | 17.850       | 17.775       | 17.480   | 17.892        | 18.313  | 23.100 17.850 17.775 17.480 17.892 18.313 Continuing Continuing | Continuing |

# A. Mission Description and Budget Item Justification.

The Joint Theater Air and Missile Defense Organization (JTAMDO) is a new organization that consolidates on-going DoD efforts in theater air & missile defense. The Communications, Computers, and Intelligence (EA TAD BMC4I). In order to establish a single organization within DoD responsible for joint integrated theater air and effort evolved from an ASD/C3I charter in July, 1994 identifying the Air Force as the Executive Agent for Theater Air Defense Battle Management Command, Control missile defense requirements, operational concepts, and architectures, the Secretary of Defense and the Chairman of the Joint Chiefs of Staff have established the Joint Theater Air and Missile Defense Organization (JTAMDO). This new organization absorbs the requirements and resources from PE 060547F (EA TAD BMC4I). All unctions and outyear resources previously assigned by ASD/C31 to the EA TAD BMC4I have been transferred to JTAMDO.

efforts which should be designated as TAMD programs; specify tasking to Working Integrated Product Teams (WIPTs) and establish through the TAMD Integration IPT JTAMDO is the single organization within DoD responsible for the planning, coordination, and oversight of joint integrated theater air and missile defense requirements generation (including capstone requirements), joint operational concepts, architecture development, and supporting technical annexes. The JTAMDO functions include: new, task-oriented WIPTs as necessary; develop and maintain the requirements section of the Master Plan for fielding integrated TAMD capabilities; and coordinate defense Master Plan; serve as the joint theater air and missile defense resource proponent within the resource allocation structures of Services, BMDO, and DARPA; with the Services, BMDO, and DARPA to ensure JTAMD requirements are effectively evaluated in test efforts. This program is in budget activity 6 - as it performs represent the Services and warfighting CINC's requirements for theater air and missile defense; develop the requirements section of the joint theater air and missile monitor the research, development, acquisition, and demonstration activity associated with the Services's TAMD programs; recommend to the JROC those RD&A management support of RDT&E Activities.

| FY 1997 | \$0 |
|---------|-----|
| FY 1996 | \$0 |

#### FY 1998

- Develop and maintain the requirements section of the Master Plan for fielding integrated theater air and missile defense capabilities. This will include the development and submittal of the overall theater air and missile defense objectives, integrated air and missile defense architectures, joint operational concepts, capstone requirements documents, roadmaps identifying the projected milestones of investment programs planned to meet DoD TAMD objectives, and a report on the status of each TAMD program. Assess Service POMs and Identify investment opportunities.
- Coordinate and support the Services, CINCs, and Agencles in interoperability assessments and initiatives. Participate in advanced concept technology demonstrations of TAMD capabilities and provide operational assessments. Participate in appropriate TAMD working level and over-arching IPTs and ensure IPT products are integrated Into a comprehensive package. \$7.800
- Conduct modeling and simulation activities to support TAMD programs and assessments. Sponsor and direct a high fidelity TAMD wargame followed by a geographically distributed wargame with hardware in the loop testing. Assess and validate joint operational concepts and assess TAMD operational \$3.000
  - Perform studies and analyses to support TAMD operational requirements definition, Joint operational concepts, technology insertion opportunities, and architecture development and validation. \$0.900

\$1.200 Fund JIAMDO operations, including civilian pay, office lease, office equipment, training, and travel.





| RDT&E BUDGET ITEM JU                 | ITEM JUSTIFICATION SHEET (R-2 Exhibit)                               | Date: | Feb-97 |
|--------------------------------------|--|-------|--------|
| Appropriation/Budget Activity        | R-1 Item Nomenclature  |       |        |
| RDT&E, DEFENSE WIDE, JOINT STAFF/BA6 | 0605126J Joint Theater Air and Missile Defense Organization (JTAMDO) |       |        |
| EV 1000                              |  |       |        |

- Continue to develop and maintain the requirements section of the Master Plan for fielding integrated theater air and missile defense capabilities. This will operational concepts, capstone requirements documents, roadmaps identifying the projected milestones of investment programs planned to meet DoD include the development and submittal of the overall theater air and misslle defense objectives, integrated air and misslle defense architectures, Joint AMD objectives, and a report on the status of each TAMD program. Assess Service POMs and Identify investment opportunities. \$7.175
- rechnology demonstrations of TAMD capabilities and provide operational assessments. Participate in appropriate TAMD working level and over-arching Continue to coordinate and support the Services, CINCs, and Agencies in interoperability assessments and initiatives. Participate in advanced concept IPTs and ensure IPT products are integrated into a comprehensive package.. \$5.975
- Continue modeling and simulation activities to support TAMD programs and assessments. Sponsor and direct wargames that support the assessment and validation of joint requirements, operational concepts, and architectures.
- Continue to perform studies and analyses to support TAMD operational requirements definition, joint operational concepts, technology insertion opportunities, and architecture development and validation. \$0.800
- Continue to fund JIAMDO operations, including civilian pay, office lease, office equipment, training, and travel. \$1.200
- \$17.850 Total

### B. Program Change Summary.

|                                   | FY96 | FY97 | FY98   | <u>FY99</u> |
|-----------------------------------|------|------|--------|-------------|
| FY97 President's Budget           | 0    | 0    | 0      | 0           |
| Appropriated - FY97               | 0    | 0    | 0      | 0           |
| Adjustments to Appropriated Value |      |      |        |             |
| a. Transfer of Program            | 0    | Õ    | 23.100 | 17.850      |
| Current FY98 Budget Submission    | 0    | 0    | 23.100 | 17.850      |

### Change Summary Explanation

In FY98 and FY99 funding was transferred from the EA TAD BMC4I program (PE 0605704F) and in FY98 funds also transferred from the Advanced Technology Development program (PE 0603750D).

- C. Other Program Funding Summary. N/A.
- D. Schedule Profile. N/A.

| RDT&E BUDGET ITEM JUSTIFICAT              | JUSTIFICAI | TION SHEET (R-2 Exhibit) | T (R-2 Exh | ibit)      |                       |             |          |  | DAIE     |        |
|---|------------|--------------------------|------------|------------|-----------------------|-------------|----------|--|----------|--------|
|   |            |                          |            |            |                       |             |          |  |          | Feb-97 |
| Appropriation/Budget Activity             |            |                          |            | R-1 Item N | R-1 Item Nomenclature | re          |          |  |          |        |
| RDT&E, DENFENSE WIDE, THE JOINT STAFFF/BA | STAFFF/BA  | 7                        |            | 0208052J,  | Joint Analy           | tical Mode  | Improver | 2208052J, Joint Analytical Model Improvement Program (JAMIP) | (JAMIP)  | Ü      |
|   |            |                          |            |            |                       |             |          |  | ost to   | TOTAL  |
| COST (IN MILLIONS)                        | FY96       | FY97                     | FY98       | FY99       | FY00                  | FY01        | FY02     | FY03   | Complete | COST   |
| TOTAL PE COST                             | 0.000      | 1.000                    | 2.186      | 1.883      | 1.066                 | 1.066 0.374 | 0.206    | 0  | TBD      | TBD    |

simulation of multi-sided, joint warfare for analysis. Users of JWARS will include the Combatant Commanders, Joint Staff, Services, OSD, and centerpiece of JAMIP is the development of the Joint Warfare System (JWARS), which will be a state-of-the-art, closed-form, constructive other DoD organizations. This program is in Budget Activity 7 -Operational Systems Development because it supports currently employed OSD/PA&E. JAMIP will enhance the current suite of models and simulations providing analytic support, and will develop new tools. The In May 1995, DepSecDef approved JAMIP to improve analytic support to senior DoD officials. The Joint Staff/J8 shares the lead with systems and training activities.

# B. Program Change Summary

|                                   | FY96  | FY97  | FY98   | FY99   |
|-----------------------------------|-------|-------|--------|--------|
| FY 97 President's Budget          | 0.000 | 0.000 | 0.000  | 0.000  |
| Appropriated -FY97                |       | 0.000 |        |        |
| Adjustments to Appropriated Value |       |       |        |        |
| a. Transfer from O&M              |       | 1.000 | 1.293  | 1.092  |
| b. Theater-level analytic models  |       |       | 0.900  | 0.800  |
| c. Inflation                      |       |       | -0.007 | -0.009 |
| Current FY98 Budget Submission    | 0.000 | 1.000 | 2.186  | 1.883  |

### Change Summary Explanation:

- a. R&D funds needed for research and design on challenging representation problems and independent testing.
   b. The increase of .900 and .800 is in FY98 and FY99 respectively for theater-level analysis models.
   c. Program reduced for inflation .007 and .009 in FY98 and FY99 respectively

# C. Other Program Funding Summary: N/A

#### D. Schedule Profile.

The RDT&E will be spent during various quarters of each FY.



| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2                             | ON SHEET (F | ?-2 Exhibit) |                         |   |               |       |       |           |          | DATE: Feb 97 |
|--|-------------|--------------|-------------------------|---|---------------|-------|-------|-----------|----------|--------------|
| Appropriation/Budget Activity<br>RDT&E, DEFENSE WIDE, JOINT STAFF/BA 7 |             |              | R-1 Item No<br>3303149J | R-1 Item Nomenclature:<br>0303149J CAIFor the Warrior | ə:<br>Warrior |       |       |           |          |              |
| COST (IN MILLIONS)   | FY96        | FY97         | FY98                    | FY99  | FY00          | FY01  | FY02  | FY03      | Complete | cost         |
| TOTAL PE COST  | 0.171       | 2.554        | 5.554                   | 3.215   | 3.277         | 3.34  | 3.396 | 3.487 TBD | TBD      | TBD          |
| Prog: Joint C4ISR Battle Center  |             |              | 2.964                   | 3.025   | 3.088         | 3.153 | 3.221 | 3.297 TBD | TBD      | TBD          |
| Prog: STEP/JWIDS/Adv Cnpts   | 1710        | 2.554        | 2.590                   | 0.191   | 0.190         | 0.187 | 0.175 | 0.190 TBD | ТВД      | TBD          |

The Joint Staff J-6 is tasked to continuously identify, prioritize, and quickly solve Joint C41 interoperability problems. C41FTW's three overlapping phases lead to directly associated with C4IFTW efforts. The C4IFTW PE includes annual Joint Warrior Interoperability Demonstrations (JWIDS), the Standardized Tactical Entry C4! for the Warrior (C4IFTW) is the Chairman of the Joint Chiefs of Staff (CJCS) initiative promoting joint and coalition C4I interoperability per DOD Directives. Element provides focus and visibility into resolving C41 interoperability issues. It includes, but is not limited to, RDT&E, Procurement, and O&M related costs global interoperability for US military forces deployed anywhere, on any mission, at any time, with maximum flexibility in force composition. This Program Point (STEP) initiatives, Advanced Concepts, and the Joint C4ISR Battle Center (JBC).

### B. Program Change Summary

|  | FY96  | FY97   | FY98   | FY99   |  |
|--|-------|--------|--------|--------|--|
| FY 97 President's Budget                         |       | 2.618  | 2.599  | 0.191  |  |
| Appropriated -FY97                               |       | 2.618  |        |        |  |
| Adjustments to Appropriated Value                |       |        |        |        |  |
| a. Programmatic Adjustment:                      |       |        |        |        |  |
| Funding added for JBC                            |       |        | 2.974  | 3.039  |  |
| b. Non- Programmatic Adjustment:                 |       |        |        |        |  |
| (General Congressional reductions and Inflation) |       | -0.064 | -0.019 | -0.015 |  |
| Current FY98 Budget Submission                   | 0.171 | 2.554  | 5.554  | 3.215  |  |

### Change Summary Explanation:

a. FY97 was reduced by \$64K because of general Congressional reductions. Reductions in FY98 and FY99 are due to inflation.

| O                                | FY03 |
|----------------------------------|------|
|                                  | FY02 |
|                                  | FY01 |
|                                  | FY00 |
|                                  | FY99 |
|                                  | FY98 |
|                                  | FY97 |
|                                  | FY96 |
| C. Other Program Funding Summary |      |

TOTAL

COST TO

|             | FY96  | FY97   | FY98   | FY99   | FY00   | FY01   | FY02   | FY03   | COMPLETE | COST |
|-------------|-------|--------|--------|--------|--------|--------|--------|--------|----------|------|
| O&M         | 1.053 | 1.153  | 15.605 | 17.122 | 17.556 | 17.930 | 18.234 | 18.836 | TBD      | TBD  |
| Procurement | 8.852 | 10.360 | 15.095 | 18.032 | 5.857  | 5.938  | 6.192  | 6.342  | TBD      | TBD  |

#### D. Schedule Profile.

Approx. 0.2M will be spent in conjuction with the annual Joint Staff sponsored Joint Warfighting Interoperability Demonstration (JWID) usually conducted in the 4th quarter of the FY. The remaining RDT&E will be spent during various quarters of each FY as advanced system concepts, concepts of operation, and operational requirements for the emerging information macrosystem evolve.

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-                                   | ON SHEET ( | R-2 Exhibit) | Ð     |                         |   |  |             |       | DATE                | Feb-97        |
|---|------------|--------------|-------|-------------------------|---|--|-------------|-------|---------------------|---------------|
| Appropriation/Budget Activity<br>RDT&E, DENFENSE WIDE, THE JOINT STAFFF/BA7 |            |              |       | R-1 Item No<br>0303149J | R-1 Item Nomenclature<br>0303149J CAIFTW - Joir | R-1 Item Nomenclature<br>0303149J CAIFTW - Joint CAISR Battle Center | attle Cente | _     |                     |               |
| COST (IN MILLIONS)  | FY96       | FY97         | 86A4  | FY99                    | FY00  | FY01   | FY02        | FY03  | Cost to<br>Complete | TOTAL<br>COST |
| Program: Joint Battle Center  | 0.000      | 0.000        | 2.964 | 3.025                   | 3.088   | 3.153  | 3.221       | 3.297 | TBD                 | TBD           |

(C4ISR) Battle Center within the Defense Information Services Agency (DISA) will assimilate demonstrations and experiments of large scale engineering required for force generators which will engender a powerful environment for Joint operational innovations. Industry driven technology advancements dictate rapid insertion A. Mission Description and Budget Item Justification. The Joint Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance architecture development of Joint warfighting systems integration which leverage C4ISR. The Center grew out of the FY1995 Chairman of the Joint Chiefs of Staff ability to effectively field evolutionary systems and equipment which assure joint operational capability dominance by quickly organizing and testing innovative C4ISR concepts. The Center will also ensure that as new C4ISR concepts surface, these concepts will be developed to share all C4ISR information with precision (CJCS) initiative to address the need to provide comprehensive Joint warfighting capability that maintains a competitive military advantage dependent on the assessment specific parameters by utilizing the latest technology insertion and applications to provide a consistently improving state of readiness for the joint into the DoD C4ISR infrastructure to maintain this competitive advantage. The Center will support experiments in mission with actual battle scenarios and warfighter. This program element is under Budget Activity 07 because it supports operational systems development.

## B. Program Change Summary

| (                                 |       |       |             |        |
|-----------------------------------|-------|-------|-------------|--------|
|                                   | FY96  | FY97  | <u>FY98</u> | FY99   |
| FY 97 President's Budget          | 0.000 | 0.000 | 0000        | 0.000  |
| Appropriated -FY97                |       | 0.000 |             |        |
| Adjustments to Appropriated Value |       |       |             |        |
| a, Transfer JBC from DISA         |       |       | 2.974       | 3.039  |
| b, Inflation                      |       |       | -0.010      | -0.014 |
| Current FY98 Budget Submission    | 0.000 | 0.000 | 2.964       | 3.025  |

#### Change Summary Explanation:

- a. The Joint C4ISR Battle Center (JBC) was created within the Defense Information Systems Agency. The Joint Requirements Oversight Council recently determined the JBC fills a valid warfighting requirement and should report directly to The Joint Staff (TJS)
- b. JBC received a general reduction for inflation

| ıram Funding Summary |  |
|----------------------|--|
| C. Other Prog        |  |
|                      |  |

|             | FY96  | FY97  | FY98   | FY99   | FY00   | <u>FY01</u> | <u>FY02</u> | FY03   | COMPLETE | COSI |
|-------------|-------|-------|--------|--------|--------|-------------|-------------|--------|----------|------|
| O&M         | 0.000 | 0.000 | 11.834 | 12.071 | 12.456 | 12.730      | 13.009      | 13.296 | TBD      | TBD  |
| Procurement | 0.000 | 0.000 | 4.903  | 5.004  | 5.112  | 5.224       | 5,346       | 5.479  | TBD      | TBD  |
|             |       |       |        |        |        |             |             |        |          |      |

D. Schedule Profile.

The RDT&

e spent dulring various quarters of each FY.

77 (3:18 PM/RDTEexhib.xls

 $\infty$ 



| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2                             | ON SHEET ( | R-2 Exhibit) | ₽                         |   |                     |           |           |          |                     | DATE: Feb 97 |
|--|------------|--------------|---------------------------|---|---------------------|-----------|-----------|----------|---------------------|--------------|
| Appropriation/Budget Activity<br>RDT&E, DEFENSE WIDE, JOINT STAFF/BA 7 |            |              | R-1 Item No<br>0303149J ( | R-1 Item Nomenclature:<br>0303149J C4I For The Warrior - STEP/JWIDS/Advanced Concepts | e:<br>Narrior - STE | P/JWIDS/A | dvanced C | concepts |                     |              |
| COST (IN MILLIONS)   | FY96       | FY97         | FY98                      | FY99  | FY00                | FY01      | FY02      | FY03     | Cost to<br>Complete | TOTAL        |
| Prog: STEP/JWIDS/Adv Cnpts   | 0.171      | 2.554        | 2.59                      | 0.191   | 0.190               | 0.187     | 0.175     | 0.190    | TBD                 | TBD          |

battlefields. Central to this emerging vision is an evolving concept currently referred to as the "information macrosystem." A compelling need exists to explore and develop advanced system concepts, concepts of operation, and operational requirements for the emerging information macrosystem. A portion of this effort This program assists in the definition of a joint Precision Force C4I Operational Architecture by identifying common and integrated communications paths and platforms that will support Joint Strike, Defense, and Maneuver Operations by 2010 in accordance with the CJCS Vision 2010. It is in direct response to DOD Additionally, CJCS is actively advocating a new vision for Information Warfare and Information Assurance that will enable US led forces to dominate future will assist in the refinement of Joint C4ISR concepts, doctrines, and requirements by allowing us to perform the necessary research and development for guidance directing the Joint Staff to lead an effort to develop an integrated architecture to support Joint Strike, Defense, and Maneuver Operations. customizing commercial technologies for the warfighter. Joint Staff leadership of this effort requires this focused research and development initiative.

| B. Program Change Summary                        |       |        |        |             |  |
|--|-------|--------|--------|-------------|--|
|  | FY96  | FY97   | FY98   | <u>FY99</u> |  |
| FY 97 President's Budget                         |       | 2.618  | 2.599  | 0.191       |  |
| Appropriated -FY97                               |       | 2.618  |        |             |  |
| Adjustments to Appropriated Value                |       |        |        |             |  |
| a. Nonprogrammatic Adjustment                    |       |        |        |             |  |
| (General Congressional reductions and Inflation) |       | -0.064 | -0.009 | -0.001      |  |
| Current FY98 Budget Submission                   | 0.171 | 5.172  | 2.590  | 0.190       |  |

### Change Summary Explanation:

a, FY97 was reduced by \$64K because of general Congressional reductions. Reductions in FY98 and FY99 are due to inflation changes.

| C. Olitei riogidin randing sammiaiy |   |       |        |        |       |       |       |       |          | - N  |
|-------------------------------------|---|-------|--------|--------|-------|-------|-------|-------|----------|------|
| FY96                                |   | 797   | FY98   | FY99   | FY00  | FYOI  | FY02  | O     | COMPLETE | COSI |
| 1.053                               | _ | 1.153 | 3.771  | 5.051  | 5.100 | 5.200 | 5.225 | 5.540 | 1BD      | 1BD  |
| Procurement 8.852                   |   | 0.360 | 10.192 | 13.028 | 0.745 | 0.714 | 0.846 |       | 180      | 180  |

#### D. Schedule Profile.

Approx. 0.2M will be spent in conjuction with the annual Joint Staff sponsored Joint Warfighting Interoperability Demonstration (JWID) usually conducted in the 4th quarter of the FY. The remaining RDT&E will be spent during various quarters of each FY as advanced system concepts, concepts of operation, and operational requirements for the emerging information macrosystem evolve.

| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | N SHEET ( | R-2 Exhib | £          |                       |                  |                                    |       |       | DATE      |        |
|---|-----------|-----------|------------|-----------------------|------------------|------------------------------------|-------|-------|-----------|--------|
|   |           |           |            |                       |                  |                                    |       |       |           | Feb-97 |
| Appropriation/Budget Activity                       |           |           | R-1 Item N | R-1 Item Nomenclature | re               |                                    |       |       |           |        |
| RDT&E, DEFENSE WIDE, THE JOINT STAFF/BA 7           |           |           | 0902298J - | MANAGEN               | <b>JENT HEAD</b> | 0902298J - MANAGEMENT HEADQUARTERS |       |       |           |        |
|   |           |           |            |                       |                  |                                    |       |       |           |        |
| COST (IN MILLIONS)                                  | FVOA      | EV07      | FVOR       | EVOO                  | L<br>L           | 10/1                               | EVOS  | LV03  | Cost to   | TOTAL  |
|   | 2         | ,,,,      | 26         | 2                     | 201              | 011                                | L102  | 2012  | eielduloo | 203    |
| TOTAL PE COST                                       | 3.999     | 10.012    | 10.035     | 9.806                 | 9.920            | 9.890                              | 9.885 | 9.899 | TBD       | TBD    |

relationships between warfighting capabilities and interactions and identify opportunities for improving warfighting effectiveness. This program is in Budget Services, Office of the Secretary of Defense, Federally Funded Research and Development Centers, and others as necessary. Assessments examine key Joint Warfighting Capabilities Assessment (JWCA) are studies conducted in: Strike; Land and Littoral Warfare; Strategic Mobility and Sustainability; Sea, Intelligence, Surveillance and Reconnalissance; Joint Readiness (Personnel); Joint Readiness (Forces); and Joint Readiness (Exercise/Training). Each JWCA is sponsored by a Joint Staff Directorate and is conducted by teams of warfighting and functional area experts from the unified commands, Air and Space Support; Deterrence/Counter Proliferation; Regional Engagement/PRESENCE; Command and Control (C2); Information Warfare; Activity 7 - Operational Systems Development because it supports currently employed systems and training activities.

#### -3.000 25.382 -0.046 9.806 38.234 .24.478 -0.03337.546 -3.000 10.035 -3.000 34.912 10.012 34.912 -21.577 -0.323**FY97** 3.999 Adjustments to Appropriated Value Current FY98 Budget Submission B. Program Change Summary c. Congressional Reduction b. Transfer to new JSIMS PE a. Transfer to JWCA O&M FY 97 President's Budget Appropriated -FY97 d. Inflation

#### Change Summary Explanation:

- a. Transfer to O&M: The Joint Staff received \$14M RDT&E for JWCA as a part of the development of the FY1997 President's Budget. The RDT&E funding was based on a review of the Initial studies requests. Since that time, the actual requirements have proven to be a mixture of O&M and RDT&E.
  - b. FY97 PB funding included the Joint Simulation Sytems (JSIMS). A new PE, 0902740J, has been set up to track this system and the funds have been transferred.
    - c. & d. Congressional and inflation reductions.

| C. Other Program Funding Summary |       |       |       |       |       |       |       | COST TO       | TOTAL |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|---------------|-------|
|                                  | FY96  | FY97  | FY98  | FY99  | FY00  | FY01  | FY02  | FY03 COMPLETE | COSI  |
| 0&M                              | 0.000 | 3.000 | 3.000 | 3.000 | 3.000 | 3.000 | 3.000 |               | A/N   |
|                                  |       |       |       |       |       |       |       |               |       |

#### D. Schedule Profile.

The RDT&E will be spent during various quarters of each FY.

Exhibit P-2



| RDT&E                                | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | ITEM JU | STIFICAL              | TON SHE       | ET (R-2 F                                    | (xhibit)  |        |        | Date:  | Feb-97     |
|--------------------------------------|---|---------|-----------------------|---------------|--|-----------|--------|--------|--|------------|
| Appropriation/Budget Activity        |   |         | R-1 Item Nomenclature | ature         |  |           |        |        |  |            |
| RDT&E, DEFENSE WIDE, JOINT STAFF/BA7 | AFF/BA7   |         | PE 0902740.           | J -Joint Simu | PE 09027401 -Joint Simulation System (JSIMS) | n (JSIMS) |        |        |  |            |
|                                      |   |         |                       |               |  |           |        |        | Cost to  | TOTAL      |
| COST (\$ IN MILLIONS)                | FY96  | FY97    | FY98                  | FY99          | FY99 FY00 FY01                               | FY01      | FY02   | FY03   | FY03 Complete COST   | COST       |
| TOTAL PE COST                        | 0   | 21.054  | 24.321                | 25.179        | 19.173                                       | 17.073    | 17.406 | 17.781 | 21.054 24.321 25.179 19.173 17.073 17.406 17.781 Continuing Continuing | Continuing |

0902298J. It has since been moved into its own PE. JSIMS is at the leading edge of the Goldwaters-Nichols Act as the vehicle to institute capability to support Joint or Service training, rehearsal, or education objectives. JSIMS is a core of common and joint representations and In the FY97 PB, funding for the Joint Simulation System was budgeted in the Joint Staff's Management Headquarters Program Element functionality. JSIMS includes a strategy for cooperative development that is based on the use of Executive Agents (i.e. Army, Navy, AF, etc.) to provide authoritative domain-specific representations. This program is in budget activity 7 - Operational Systems Development, infrastructure and mission space objects, both maintained in a common repository. The objects can be composed to create a simulation services, a runtime hardware and software infrastructure, interfaces, and representations of Air/Space, Land, and Maritime Warfare environment designed to train CINCs and Services to meet the Chairman's Joint Training System requirements. It includes a core interoperability and Joint Training, and eliminate Service stovepipe training. JSIMS is a single, seamlessly integrated simulation because it supports currently employed systems and training activities.

| O\$ | <del>)</del> |  |
|-----|--------------|--|
|     |              |  |

| FY 1999        | \$16.382 Development Contract | 3.000 Support Contracts | 3.297 Program Office | 1.900 Modeling                    |
|----------------|-------------------------------|-------------------------|----------------------|-----------------------------------|
| <u>FY 1998</u> | \$15.700 Development Contract | 2.959 Support Contracts | 2.812 Program Office | 1.950 Modeling                    |
| FY 1997        | \$14.000 Development Contract | 3.600 Support Contracts | 2.154 Program Office | 0.500 Domain Engineering Contract |

0.500 Independent verification/validation

0.700 Independent verification/validation

0.100 Hardware

\$25.179 Total

 0.300
 Hardware
 0.200
 Hardware

 \$21.054
 Total
 \$24.321
 Total

0.500 Independent verification/validation

| RDT&E   | RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | EM JUST                      | IFICATIO                                     | ON SHEET                  | r (R-2 Ex   | hibit    |             |           | Date:      | Feb. 07         | 07 |
|---|---|------------------------------|--|---------------------------|-------------|----------|-------------|-----------|------------|-----------------|----|
| Appropriation/Budget Activity   |   | R-1                          | R-1 Item Nomenclature                        |                           |             |          |             |           |            |                 |    |
| RDT&E, DEFENSE WIDE, JOINT STAFF/BA7  | FF/BA7  | PE                           | PE 0902740J -Joint Simulation System (JSIMS) | oint Simulati             | on System ( | JSIMS)   |             |           |            |                 |    |
| B. Program Change Summary.  |   |                              |  |                           |             |          |             |           |            |                 |    |
|   | FY96*   | FY97**                       | FY98   | FY99                      |             |          |             |           |            |                 |    |
| FY97 President's Budget   | 0   | 21.577                       | 24.478                                       | 25.382                    |             |          |             |           |            |                 |    |
| Appropriated - FY97   | 0   | 21.577                       | 0  | 0                         |             |          |             |           |            |                 |    |
| Adjustments to Appropriated Value   | 0   | 0                            | 0  | 0                         |             |          |             |           |            |                 |    |
| a. Non-programmatic adjustment  | 0   | -0.523                       | -0.157                                       | -0.203                    |             |          |             |           |            |                 |    |
| Current FY98 Budget Submission  |   | 21.054                       | 24.321                                       | 25.179                    |             |          |             |           |            |                 |    |
| Change Summary Explanation  |   |                              |  |                           |             |          |             |           |            |                 |    |
| *In FY96, JSIMS was funded through the Defense Modeling and Simulation Organization. **JSIMS funding was initially authorized under PE 0902298J (Management HQ JCS). Subsequently it was moved to its own PE 0902740J. In FY97 there were | the Defense Mo<br>ced under PE 090                  | deling and Sa<br>32298J (Man | imulation Or<br>tagement HQ                  | ganization.<br>JCS). Subs | equently it | was move | ed to its o | wn PE 09( | )2740J. In | n FY97 there we | 5  |
| Congressional general reduction of .323, and in FY98 and FY99 inflation adjustments.  | 3, and in FY98 a                                    | ind FY99 inf                 | lation adjust                                | ments.                    |             |          |             |           |            |                 |    |
| C. Other Program Funding Summary.   | nmary. N/A  | _                            |  |                           |             |          |             |           |            |                 |    |
| D. Schedule Profile.  |   |                              |  |                           |             |          |             |           |            |                 |    |
|   | FY 1996   | ,,                           | FY 1997                                      | 7                         | FY 1998     | ∞        | ш,          | FY 1999   |            |                 |    |
| (Fiscal Qtr)  | 1 2 3   | 4                            | 1 2 3  | 3 4 1                     | 7           | 3 4      | 1           | 2 3       | 4          |                 |    |
| (U) RFP Release   |   | ×                            |  |                           |             |          |             |           |            |                 |    |
| (U) Contract Award  |   |                              | ×  |                           |             |          |             |           |            |                 |    |
| (U) Software Build 0  |   |                              |  | ×                         |             |          |             |           |            |                 |    |
| (U) Software Build 1  |   |                              |  |                           |             | ×        |             |           |            |                 |    |
| (U) Software Build 2  |   |                              |  |                           |             |          | ×           |           |            |                 |    |
| (U) Initial Ops Capability (IOC)  |   |                              |  |                           |             |          |             |           | ×          |                 |    |
| and software version 1.0  |   |                              |  |                           |             |          |             |           |            |                 |    |
|   |   |                              |  |                           |             |          |             |           |            |                 |    |
|   |   |                              |  |                           |             |          |             |           | Exh        | Exhibit R-2     |    |
|   |   |                              |  |                           |             |          |             |           |            |                 |    |



| RDT&E BUDGET ITEM JUSTIFICATION SHEET (R-2 Exhibit) | JUSTIFICA | TION SH | EET (R-2 E  | xhibit)                              |             |       | ·     |       | DATE     |        |
|---|-----------|---------|-------------|--------------------------------------|-------------|-------|-------|-------|----------|--------|
|   |           |         |             |                                      |             |       |       |       |          | Feb-97 |
| Appropriation/Budget Activity                       |           |         | R-1 Item No | R-1 Item Nomenclature                | Je          |       |       |       |          |        |
| RDT&E, DEFENSE WIDE, THE JOINT STAFF/BA             | TAFF/BA 7 |         | 1001001     | 1001017J Partnership-for-Peace (PFP) | o-for-Peace | (PFP) |       |       |          |        |
|   |           |         |             |                                      |             |       |       |       |          |        |
|   |           |         |             |                                      |             |       |       |       | Cost to  | TOTAL  |
| COST (IN MILLIONS)                                  | FY96      | FY97    | FY98        | FY99                                 | FY00        | FY01  | FY02  | FY03  | Complete | COST   |
|   |           |         |             |                                      |             |       |       |       |          |        |
| TOTAL PE COST                                       | 0.000     | 0.000   | 1.993       | 1.991                                | 1.989       | 1.987 | 1.986 | 1,989 | TBD      | 1BD    |
|   |           |         |             |                                      |             |       |       |       |          | i      |

98. Currently PIMs policy and technical briefing teams are in the first stages of International Memorandums of Agreement (MOA) with several cycle cost sharing. The international MOA which covers all these programs and requirements will remain in force for five years. The five year The Partnership for Peace Information Management System (PIMS) will launch a comprehensive R&D effort with 27 PFP nations starting in FYT Partner nations a vehicle for collective cost avoidance through collaborative database development and operation and maintenance life Partner nations. These MOAs define the requirements, mutual obligations, and detailed activities of the signatories in accordance with the development program is supported by an O&M budget line to maintain the infrastructure necessary to focus the efforts of numerous DoD particular circumstances of each nation. Formal implementation of PIMs - briefing teams, MOAs, site surveys, installations, training and operation (communication, data base development, and maintenance) also will formally begin in FY 98. This provides the U.S. and 21 and PFP programs on specific database development efforts. This program is in Budget Activity 7, Operational Systems Development, because it supports currently employed systems and training activities.

### B. Program Change Summary

| EY96 FY97 FY98 FY99 | 0.000                    |                    | ed Value                          | 2.000 2.000            | -0.007       | 0.000 0.000 1.993              |
|---------------------|--------------------------|--------------------|-----------------------------------|------------------------|--------------|--------------------------------|
|                     | FY 97 President's Budget | Appropriated -FY97 | Adjustments to Appropriated Value | a, R&D efforts funded. | b. Inflation | Current FY98 Budget Submission |

### Change Summary Explanation:

- a.) Funds added for R&D efforts. b.) There is an inflation adjustment starting in FY98.

### C. Other Program Funding Summary

| O&M  | <u>FY96</u><br>40.000 | <u>FY97</u><br>48.560 | <u>FY98</u><br>44.162 | <u>FY99</u><br>54.969 | <u>FY00</u><br>55,500 | EY01<br>55.500 | <u>FY02</u><br>55.500 | EY03<br>55.500 | COMPLETE<br>TBD | COSI |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|-----------------------|----------------|-----------------|------|
| <ul><li>D. Schedule Profile.</li><li>The RDT&amp;E will be spent during various qu</li></ul> | us quarter            | larters of each FY    | ⊱:                    |                       |                       |                |                       |                |                 |      |

Exhibit R-2

TOTAL

COST 10

| RDT&E PROGRAM ELEMENT/PROJECT COST BREAKDOWN (R-3)   | 3)  |  |   | DATE                                  | ATE<br>Feb-07 |
|--|---|--|---|---------------------------------------|---------------|
| Appropriation/Budget Activity RDT&E, DEFENSE WIDE, THE JOINT STAFF   | R-1 item Nomenclature<br>Island Sun, JTAMDO, JAMIP, CAIFTW, JSIMS, MGT HQ., PFP | S, MGT HQ.,  | PFP   |                                       |               |
| A. <u>Project Cost Breakdown</u>   | FY96  | FY97   | FY98  | <u>FY99</u>                           |               |
| 0603734J - ISLAND SUN<br><b>TOTAL BA 04</b>  | 1.35 <u>6</u><br>1.35 <b>6</b>  | 1.216<br>1.216   | O) <b>O</b>   | O  <b>0</b>                           |               |
| 0605126J - Joint Theater Air & Missile Defense Office (JTAMDO)   | 0 (0)   | 0  | 23.100<br>23.100                                      | 17.85 <u>0</u>                        |               |
| 0208052J - Joint Analytical Model Improvement Program (JAMIP) 0303149J - C4I for the Warrior (C4IFTW) 0602740J - Joint Simulation Systems (JSIMS) 0902298J - Management Headquarters 1101017J - Partnership for Peace TOTAL BA 07  TOTAL RDT&E | AMIP) 0<br>0.171<br>0<br>3.999<br><u>0</u><br><b>4.170</b>                      | 1.000<br>2.554<br>21.054<br>10.012<br>34.620<br>35.836 | 2.186<br>5.554<br>24.321<br>10.035<br>1.993<br>44.089 | 1.883 3.215 25.179 9.806 1.991 42.074 |               |

# B. Budget Acquisition History and Planning Information

FY98 is the first year for RDT&E funding for Partnership-for Peace (PRP) and the Joint Theater Air & Missile Defense Organization (JIAMDO).



2/6/97\3:04

